Tuberculous Meningitis in an Infant Vaccinated with B.C.G.

The difficulty of assessing the value of B.C.G. vaccination is considerable. Adequate statistical data are so far lacking, and attention has therefore to be paid to the results of clinical observations. In this connection the case reported by Dr. G. Blechmann and Dr. R. Mély[1] of tuberculous meningitis in an infant vaccinated with B.C.G. is well worth recording. Briefly, the infant was vaccinated by the mouth during the first ten days of life. It was removed from its family for six weeks and was then brought back, when it was in contact with a mother on whom an artificial penumothorax had been induced about two years previously. At the age of four and a half months the infant developed tuberculous meningitis and died in a few days. This case is of more than clinical interest. It does not stand alone, but is one of many of a similar nature that have already been recorded. Moreover, the discussion to which an account of the case gave rise before the Société Médicale des Hôpitaux de Paris, representing as it did informed clinical opinion in the actual birthplace of B.C.G., is peculiarly enlightening. Among those who took part were M. Jean Paraf, M. Marfan, M. Lesné, and M. Marcel Lelong, and the following propositions were put forward. (1) The immunity conveyed by B.C.G. is only relative, and is often established very slowly. (2) Infants should be separated at birth from tuberculous parents and kept away from them as long as possible, preferably for at least a year. This precaution is just as necessary with vaccinated as with unvaccinated infants. (3) No single prophylactic measure ought to be relaxed or remitted on account of B.C.G. vaccination. (4) It is doubtful whether vaccination of infants who are to be brought up in tuberculous families is worth while performing. It would perhaps be better to reserve B.C.G. vaccination for older children and for adolescents who have not yet been infected with the tubercle bacillus. The increased resistance produced by B.C.G. may perhaps protect against mild and occasional infections when it is powerless to protect against the frequent and probably larger infections incidental to continuous contact with a tuberculous parent. It is also pointed out that patients with artificial pneumothorax are by no means necessarily free from the risk of conveying infection to other persons. There is no need for us to add to this discussion, which has brought out so clearly the opinion to which most experimental workers have come—namely, that no method of vaccination against tuberculosis is likely to do more than tilt the scales in favour of the vaccinated subject. Whatever the ultimate value of B.C.G. will be found to be in practice, it is certain that reliance on its efficacy to the exclusion of general prophylactic measures will lead to nothing but disappointment.—*Brit. M. J.*, 1936, **1**: 1263.

1. *Bull et Mêm. Soc. Méd. des Hôp. de Paris,* April 13, 1936, No. 13, p. 579.

Medico-Legal

XXII.

The Legal Aspects of Post-Mortems

That the strongest protection against lawsuit for performing an autopsy lies in a permit signed by the relatives of the deceased is emphasized in a recent article in *Canadian Hospital,* contributed by Mr. E. F. Whitmore, legal adviser to the Saskatoon City Hospital. The permit should be in writing, although not necessarily so. One hospital receiving a verbal telephone consent follows the practice of having a second member of the staff privately listen in in the rôle of witness.

Much has been made of the necessity of determining the next of kin in obtaining a signature, but the writer believes that rarely is it necessary to exercise more than ordinary caution in this matter. Whoever conducts the business of arranging for the burial is considered to be the agent of the relative directly concerned. If the son signs rather than the widow it is obvious that he is acting on behalf of the widow. However, there are technical difficulties that must not be overlooked. It is important, too, that adequate explanation be given, lest the relative be able to say later that he misunderstood the effect of what he was signing. A permit obtained following an incomplete or inaccurate description of the nature of the autopsy may have some legal value, but it can be a source of much inconvenience.

A coroner's order given in the proper manner will be a complete defence. The coroner's inquest, however, is not primarily an investigation into the pathological cause of death, but is one to determine whether the deceased, or more often some other person, is culpable for that death; it is to clear up legal responsibilities, not medical uncertainties. The Provincial Anatomy Act also gives protection for the examination of a body, but here also the application is limited to certain bodies only.

The whole question of ownership of the dead body is an interesting one. Strictly speaking, there is no property in a dead body, which means that a corpse has no owner. Yet a decision in 1841 established that the proper persons have the right to possession of the body for the purpose of burial. An Alberta case in 1930 developed the legal point that the relative, in this case the husband, had the right to the possession and control of the body until it was interred. An unauthorized autopsy would interfere with this right, though to a slight degree.

By itself, that would not support any substantial claim for damages, though it might justify a nominal award. Such award might be given even though the relative cannot prove any actual pecuniary loss. A judgment for a larger amount will depend in most cases upon the plaintiff's ability to prove mental anguish and suffering. The professional man whose feelings have been subordinated by years of clinical contact may not appreciate the plaintiff's claim, but the judge, relatively but little acquainted with post-mortems, may prove sympathetic.

Who is liable for an illegal examination? The pathologist performing the autopsy is obviously responsible. The hospital wherein the examination is performed may also be liable, either because the pathologist may be an employee of the hospital, thus invoking the "master and servant" factor, or on the ground that the body had been entrusted to the hospital for temporary preservation, yet the latter had permitted strangers to have access to and to physically interfere with the body. G.H.A.

Abstracts from Current Literature

Medicine

Psychological Factors in Asthma. Gillespie, R. D., *Brit. M. J.*, 1936, **1**: 1285.

Asthma, in the sense of the characteristic attacks, is a peculiar mode of reaction of certain individuals to a variety of stimuli. While these stimuli may be physical, the author clearly shows that they may also be, and often are, psychological. In a certain proportion of cases diagnosis and treatment may both be wrong, if possible psychological factors are not considered.

In proof of the above assertions, the common incidence of both asthma and psychoneurosis in the same stock is cited. Moreover, numerous respiratory studies have demonstrated objectively the close relationship between emotional stimuli and the respiratory function. Asthmatic attacks involve essentially a disturbance of the vagus-sympathetic "balance". It is a long-standing physiological observation that every emotion tends to be propagated like a wave of physiological disturbance through the vagus and sympathetic systems to the viscera. Given an existing vagus-sympathetic disturbance, clearly an emotional disturbance will have unusual effects, and asthma may be one of them.

The author shows by clinical examples that an idea may become the effective stimulus eliciting the asthmatic response, just as much as pollen or horsehair; not only may emotions or ideas thus initiate individual attacks but they may act in continuing fashion to produce a state of tension, which every so often reaches explosion point—the asthmatic attack. The choice of asthma as a special mode of expression of mental unrest depends (1) on constitution; or (2) on accident—as when a patient is out of breath from exertion at the same time as he is undergoing considerable mental stress; or (3) on pre-existing fear of lung disease; or, actually, (4) on pre-existing lung disease, as bronchitis; (5) or on a conception of breathlessness, as when a patient in time of emotional stress finds himself in a closed and stuffy space; lastly, (6) on an imitation of asthmatic attacks which a patient may have witnessed. It is particularly common to be able to demonstrate the presence of a neurotic type of personality long before the appearance of asthmatic attacks. Often, too, it is not difficult to show highly satisfactory psychological reasons for the eventual onset of the seizures.

As the author says, in confirming any etiological theory the therapeutic test is of great value. In certain cases of asthma the effect of suggestion is so obvious as to be conclusive evidence of the psychological causation of the attacks. The principles of psychotherapy remain the same as in the treatment of any psychoneurosis. An analysis of the situation may readily reveal the cause of the emotional stress, as, frequently, in the case of children—parental over-anxiety. As the author explains, anxiety is infectious, and the parental attitude arouses corresponding fear and tension in the child; the latter, given a constitutional predisposition, will respond by asthma as well as fear. It is very rare indeed that asthma is symbolically appropriate to the particular psychological cause.

It is probable that the relationships which have been demonstrated between asthma and psychological factors will be found to hold over a wide range of allied conditions, as certain cases of eczema, prurigo, urticaria, epilepsy, migraine.

W. FORD CONNELL

A Theory Concerning the Mechanism and Significance of the Allergic Response. Vaughan, W. T., *J. Lab. Clin. Med.*, 1936, **21**: 629.

The writer's conception of the allergic response is summarized as follows. There is no fundamental difference between clinical allergy and experimental anaphylaxis. The allergic response is not limited to protein but may be made to a large variety of non-protein substances. There is no fundamental difference between the allergic and the so-called non-allergic individual. The response of the allergic person differs from the non-allergic in degree but not in kind. Clinical allergy is much more common than has hitherto been suspected. Vaughan found 50 per cent with minor allergy in a survey of an entire community. All persons possess the potentiality of becoming allergic, the susceptibility varying only in degree. The nature of the allergen plays a part. Animals and man are sensitized with difficulty to things with which they frequently come in contact, but more